

ABSTRACT OF INVENTION

This invention provides processes for the preparation of compounds having the structure:

wherein

X and Y are same or different, and H, OH, OR, SH, SR, NH₂, NHR', or NR'R"

Z is H, F, Cl, Br, I, CN, or NH₂.

R is hydrogen, halogen, lower alkyl of C_1 – C_6 or aralkyl, NO_2 , NH_2 , NHR', NR'R", OH, OR, SH, SR, CN, $CONH_2$, $CSNH_2$, CO_2H , CO_2R ', CH_2CO_2H , CH_2CO_2R ', CH=CHR, $CH_2CH=CHR$, or C=CR.

 R^{\prime} and $R^{\prime\prime}$ are same or different, and lower alkyl of C_{1} – $C_{6}.$

R¹³ is hydrogen, alkyl, acyl, phosphate (monophosphate, diphosphate, triphosphate, or stabilized phosphate) or silyl; and